

What is claimed is:

1. An initialization file download apparatus of a cable modem comprising:

5 a tuner unit for tuning a plurality of downstream signals and upstream signals being transmitted and received and outputting them;

a downstream unit for demodulating the downstream signal inputted from the tuner unit and separating a general data and an MAC management message;

10 a message processor for detecting configuration file name information and MAP information according to the MAC management message inputted from the downstream unit;

a non-volatile memory for storing the configuration file name information detected from the message processor;

a CPU for controlling the message processor; and

15 an upstream unit for generating/modulating the upstream signal according to the MAP information detected from the message processor.

2. The apparatus of claim 1, wherein the general data of the downstream unit is transmitted to a display unit that can be viewed by a user  
20 through an MPEG 2 transport stream interface, and the MAC management message is transmitted to the message processor.

3. The apparatus of claim 1, wherein the message processor stores the detected configuration file name information in the non-volatile memory only  
25 when the detected configuration file name information is more lately updated one

than the configuration file name information previously stored in the non-volatile memory.

4. The apparatus of claim 1, wherein the CPU compares the  
5 configuration file name information detected by the message processor and the configuration file name information stored in the non-volatile memory, and selects the configuration file name information of a higher version.

5. The apparatus of claim 1, wherein the message processor parses  
10 the format of the detected configuration file name information into a configuration file name part and a configuration file version part on the border of a delimiter part therebetween.

6. The apparatus of claim 5, wherein the format of the configuration  
15 file name information includes a file name part indicating a configuration file name, a file version part indicating a configuration file version information, and a delimiter part differentiating the file name part and the file version part.

7. The apparatus of claim 1, wherein the non-volatile memory stores  
20 the configuration file name information for initializing the cable modem.

8. An initialization file of a cable modem having a format of a  
configuration file, that is, an initialization file downloaded to an apparatus for  
downloading an initialization file of a cable modem, comprising:  
25 a file name part indicating a configuration file name;

a file version part indicating a configuration file version information; and  
a delimiter part differentiating the configuration file name part and the  
configuration file version part.

5           9.     The initialization file of claim 8, wherein the configuration file  
version information is displayed by encoding it together with the configuration file  
name in a boot file name region of a dynamic host configuration protocol (DHCP)  
message format.

10           10.    The initialization file of claim 8, wherein the configuration file  
version part indicates the file version information as a time value defined in an  
RFC868, a time protocol, or in a string form of number information.

15           11.    An initialization file download method of a cable modem  
comprising the steps of:

              registering configuration file name information in a DHCP server;  
              receiving the configuration file name information registered in the DHCP  
server;  
              comparing the received first configuration file name information with a  
20      previously stored second configuration file name information;  
              downloading the received first configuration file name information, if the  
received first configuration file name/version is more updated file than the second  
configuration file name/version upon comparison;  
              updating the memory with the downloaded first configuration file name  
25      information; and

registering a cable modem by using the received first configuration file name information.

12. The method of claim 11, wherein the step of receiving  
5 configuration file name information comprises:

parsing the first configuration file name information as received into a file name part and a version information part.

13. The method of claim 11, wherein the step of comparing the first  
10 configuration file name information with the previously stored second configuration file name information, comprising:

comparing a file name of the received first configuration file name information and that of the stored second configuration file name information;

downloading the first configuration file name information if the first  
15 configuration file name and the second configuration file name are different to each other, and comparing the first configuration file version information and the second configuration file version information if the first configuration file name is identical to the second configuration file name; and

downloading the first configuration file name information if the first  
20 configuration file version information is higher than the second configuration file version.

14. The method of claim 13, wherein the comparing step comprises:  
performing a registration process of a cable modem by using the stored  
25 second configuration file name information, if the first configuration file version

information is lower than or the same as the second configuration file version information.

15. The method of claim 11, wherein the format of the configuration  
5 file name information comprises:

a file name part indicating a configuration file name;

a file version information part indicating a configuration file version  
information; and

a delimiter differentiating the file name part and the file version information  
10 part.

16. The method of claim 11, wherein the second configuration file  
name information is downloaded in the previous process of initializing the cable  
modem.

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17. An initialization file download method of a cable modem  
comprising the steps of:

constructing the configuration file with a file name part, a file version part  
and a delimiter part and registering it in a DHCP server;

20 receiving the first configuration file name information registered in the  
DHCP server;

parsing the received first configuration file name information into a file  
name part and a file version information part;

reading the previously downloaded second configuration file name  
25 information;

comparing the first configuration file name and the read second configuration file name;

downloading the first configuration file name information if the first configuration file name and the second configuration file name are different to  
 5 each other, and comparing the first configuration file version information and the second configuration file version information if the received first configuration file name is identical to the second configuration file name; and

downloading the first configuration file name information if the first configuration file version information is higher than the second configuration file  
 10 version, and reading the second configuration file name information if the first configuration file version information is lower than or the same as the second configuration file version information; and

performing a registration process by using the first configuration file version information or the second configuration file information as selected  
 15 according to the comparison result.

18. The method of claim 17, wherein if the first configuration file version information is an initialization file that is first inputted to the cable modem, the first configuration file version information is stored in the memory and the  
 20 registration process of the cable modem is performed by using the first configuration file version information.